Grandfather Mountain contains another major concentration of rare species. It contains most of the world's bent avens, a very rare endemic with a very narrow range. It is a stronghold for Federally-listed Southern Appalachian endemics such as Roan Mountain bluet, spreading avens, the State Endangered/Federally Threatened Blue Ridge goldenrod (*Solidago spithamaea*), and the Federally Threatened Heller's blazing star (*Liatris helleri*).

Needs exist for further documentation of rare plant species from the county. Several rare species documented from the county exist as vague records and are considered historic. Many of these populations may still be extant and should be sought. Dates and locational and habitat information describing these obscure records can be obtained from the NC NHP. Glade spurge (Euphorbia purpurea), a State Candidate species, should be sought in forests on amphibolite rock. The very rare bent avens should be sought at Potato Hill. A previously-reported population of State Endangered queen-of-the-prairie (Filipendula rubra) should be sought in wet meadows near the Blue Ridge Parkway. Other species in need of relocation are the State Endangered goldenseal (Hydrastis canadensis) and bog bluegrass (Poa paludigena); the State Candidates yellow Canada lily (Lilium canadense ssp. canadense), red Canada lily (Lilium canadense ssp. editorum), yellow gentian (Gentiana flavida), and rock skullcap (Scutellaria saxatilis); and the Significantly Rare dwarf ginseng (Panax trifolius), marsh marigold (Caltha palustris), bog jack-in-the-pulpit (Arisaema triphyllum ssp. stewardsonii), bleeding heart (Dicentra eximia), eastern shooting-star (Dodecatheon meadia var. meadia), and yellow ladies'-tresses (Spiranthes ochroleuca).

## **FAUNA**

Watauga County ranks thirteenth in the state in numbers of documented rare animal species, at 33. Of 17 counties that lie completely within montane North Carolina, Watauga County ranks ninth in numbers of rare animals. The modest ranking is in part accurate and in part an indication of a need for animal surveys in the county. Groups which have been surveyed more thoroughly include birds, fishes, and salamanders. Animal surveys are needed for terrestrial mollusks and most other groups of terrestrial invertebrates. Table 4 lists the rare animal species documented from Watauga County, with an explanation of ranks and status codes at the end. Of the 33 rare animal species, there are five mammals, eleven birds, one reptile, three amphibians, three fishes, two aquatic mollusks, three terrestrial mollusks, and five butterflies. Information on the statewide distribution of rare animal species is contained in LeGrand and Hall (1999) or can be obtained from the NC NHP.

Like rare plant species, rare animal species are clustered in parts of the county where there are high elevation, unfragmented areas. These are the Amphibolite Mountains Macrosite area of northern Watauga County and Grandfather Mountain in the southwestern part of the county. Long Hope Valley supports the northern saw-whet owl (*Aegolius acadicus*), of which the Southern Appalachian population has Special Concern and Federal Species of Concern status. The Federally Endangered Carolina northern flying squirrel (*Glaucomys sabrinus coloratus*), an extremely rare endemic subspecies, lives in the Watauga County parts of Long Hope Valley. The Special Concern Cooper's hawk (*Accipiter cooperii*) and several Significantly Rare bird